

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 29-38 and AMEND claims 1, 3-6, 11-14, 19, 22 and 26 in accordance with the following:

1. (currently amended) A date-and-time management apparatus capable of inputting a date-and-time setting request from each of a plurality of date-and-time managers, comprising:

a date-and-time setting request reception unit accepting a date-and-time setting request from any date-and-time manager before accepting a date-and-time setting request from a predetermined date-and-time manager, and accepting a date-and-time setting request only from the ~~specified~~-predetermined date-and-time manager after accepting a date-and-time setting request from the ~~specified~~-predetermined date-and-time manager; and

a clock unit functioning in response to the accepted date-and-time setting request.

2. (currently amended) A date-and-time management apparatus capable of inputting a date-and-time setting request from each of a plurality of date-and-time managers in a hierarchical structure, comprising:

a date-and-time setting request reception unit accepting a date-and-time setting request from any date-and-time manager in the plurality of date-and-time managers, and then accepting a date-and-time setting request only from a date-and-time manager at a higher hierarchical level than the date-and-time manager whose ~~requested-request~~ has been accepted before; and

a clock unit functioning in response to the accepted date-and-time setting request.

3. (currently amended) The apparatus according to claim 1,
further comprising~~[[:]]~~ a date-and-time management device for a each date-and-time
~~manager-on-the date-and-time manager side, and~~

wherein said date-and-time management device for ~~the~~-each date-and-time manager comprises a date-and-time setting request unit for issuing to said date-and-time setting request

4. (currently amended) The apparatus according to claim 3, wherein said date-and-time setting request unit comprises a date-and-time copy data generation unit for generating data for a copy of the date-and-time using ~~nonreproductive-non-reproducible~~ information received from the date-and-time management device-setting request reception unit which accepted the date-and-time setting request and the date-and-time managed by said date-and-time management device for the manager that issued the date-and-time request.

5. (currently amended) The apparatus according to claim 4, wherein said date-and-time copy data generation unit encrypts the ~~nonreproductive-non-reproducible~~ information and the information about the managed date-and-time, and generates data for copy of the date-and-time.

6. (currently amended) The apparatus according to claim 4, wherein said date-and-time copy data generation unit generates a signature from a result of encrypting the ~~nonreproductive non-reproducible~~ information and the information about the managed date-and-time, and generates data for copy of a date-and-time by combining the ~~nonreproductive-non-reproducible~~ information, the managed date-and-time, and the signature.

7. (currently amended) The apparatus according to claim 3, ~~wherein: a deliverer of said date-and-time management device further comprises~~ comprising a further date-and-time management device; said date-and-time management device of the a deliverer comprises having a date-and-time setting unit for setting a date-and-time for said date-and-time management device for the each date-and-time manager when said date-and-time management device for the each date-and-time manager is delivered.

8. (original) The apparatus according to claim 1, further comprising a nonvolatile storage unit storing correction information for improving precision of said clock unit.

9. (original) The apparatus according to claim 8, further comprising a correction information resetting unit for resetting the correction information stored in said nonvolatile storage unit in said clock unit when said clock unit becomes short of power, power is applied again to said unit, and said date-and-time setting request reception unit accept a date-and-time setting request.

10. (original) The apparatus according to claim 8, wherein a secondary battery is provided as a power source of said clock unit.

11. (currently amended) The apparatus according to claim 2,
further comprising~~[[:]]~~ a date-and-time management device for ~~a~~each date-and-time
~~manager-on the date-and-time manager-side, and~~
wherein said date-and-time management device for ~~the~~each date-and-time manager
comprises a date-and-time setting request unit for issuing to said date-and-time setting request
reception unit a copy request for a date-and-time managed by said device as the date-and-time
setting request.

12. (currently amended) The apparatus according to claim 11, wherein said date-and-
time setting request unit comprises a date-and-time copy data generation unit for generating
data for a copy of the date-and-time using non-reproducible ~~nonreproductive~~-information
received from the date-and-time ~~management device~~setting request reception unit which
accepted the date-and-time setting request and the date-and-time managed by said date-and-
time management device ~~for the manager~~that issued the date-and-time request..

13. (currently amended) The apparatus according to claim 12, wherein said date-and-
time copy data generation unit encrypts the non-reproducible ~~nonreproductive~~-information and
the information about the managed date-and-time, and generates data for copy of the date-and-
time.

14. (currently amended) The apparatus according to claim 12, wherein said date-and-
time copy data generation unit generates a signature from a result of encrypting the non-
reproducible ~~nonreproductive~~-information and the information about the managed date-and-time,
and generates data for copy of a date-and-time by combining the non-reproducible
~~nonreproductive~~-information, the managed date-and-time, and the signature.

15. (currently amended) The apparatus according to claim 11, ~~wherein: a deliverer of~~
~~said date-and-time management device further comprises~~comprising a further date-and-time
management device; ~~said date-and-time management device of the~~a deliverer ~~comprises~~
having a date-and-time setting unit for setting a date-and-time for said date-and-time

management device for ~~the~~ each date-and-time manager when said date-and-time management device for ~~the~~ each date-and-time manager is delivered.

16. (original) The apparatus according to claim 2, further comprising a nonvolatile storage unit storing correction information for improving precision of said clock unit.

17. (original) The apparatus according to claim 16, further comprising a correction information resetting unit for resetting the correction information stored in said nonvolatile storage unit in said clock unit when said clock unit becomes short of power, power is applied again to said unit, and said date-and-time setting request reception unit accept a date-and-time setting request.

18. (original) The apparatus according to claim 16, wherein a secondary battery is provided as a power source of said clock unit.

19. (currently amended) A signature generation apparatus embedded with a date-and-time management function capable of inputting a date-and-time setting request from each of a plurality of date-and-time managers, comprising:

a date-and-time setting request reception unit accepting a date-and-time setting request from any date-and-time manager before accepting a date-and-time setting request from a predetermined date-and-time manager, and accepting a date-and-time setting request only from the specified-predetermined date-and-time manager after accepting a date-and-time setting request from the specified-predetermined date-and-time manager;

a clock unit functioning in response to the accepted date-and-time setting request; and

a signature generation unit generating a signature for input data to be signed according to information about a date-and-time indicated by said clock unit.

20. (currently amended) A signature generation apparatus embedded with a date-and-time management function capable of inputting a date-and-time setting request from each of a plurality of date-and-time managers in a hierarchical structure, comprising:

a date-and-time setting request reception unit accepting a date-and-time setting request from any date-and-time manager before accepting a date-and-time setting request from a predetermined date-and-time manager, and accepting a date-and-time setting request only from

the ~~specified-predetermined~~ date-and-time manager after accepting a date-and-time setting request from the ~~specified-predetermined~~ date-and-time manager;

a clock unit functioning in response to the accepted date-and-time setting request; and

a signature generation unit generating a signature for input data to be signed according to information about a date-and-time indicated by said clock unit.

21. (original) The apparatus according to claim 19, further comprising a signature stop unit stopping said signature generation unit generating a signature when an operation stop of said clock unit is detected.

22. (currently amended) The apparatus according to claim 21, further comprising: ~~one or more functions other than the function of generating a signature; and other~~ a function execution unit executing ~~other functions than the~~ a clock-started function, different than of generating a the signature, when the operation stop of said clock unit is detected.

23. (original) The apparatus according to claim 19,
further comprising a date-and-time setter information storage unit storing information about a date-and-time manager as a date-and-time setter who has issued a date-and-time setting request last accepted by said date-and-time setting request reception unit,
wherein said signature generation unit generates a signature according to the information about the date-and-time setter in addition to the date-and-time information.

24. (original) The apparatus according to claim 19,
further comprising a date-and-time setting frequency information storage unit storing a number of date-and-time setting requests ever accepted by said date-and-time setting request reception unit,
wherein said signature generation unit generates a signature according to the information about the date-and-time setting frequency information in addition to the date-and-time information.

25. (original) The apparatus according to claim 20, further comprising a signature stop unit stopping said signature generation unit generating a signature when an operation stop of said clock unit is detected.

26. (currently amended) The apparatus according to claim 25, further comprising: ~~one or more functions other than the function of generating a signature; and other~~ a function execution unit executing ~~other functions than the~~ a clock-started function, different than of generating a the signature, when the operation stop of said clock unit is detected.

27. (original) The apparatus according to claim 20,
further comprising a date-and-time setter information storage unit storing information about a date-and-time manager as a date-and-time setter who has issued a date-and-time setting request last accepted by said date-and-time setting request reception unit,
wherein said signature generation unit generates a signature according to the information about the date-and-time setter in addition to the date-and-time information.

28. (original) The apparatus according to claim 20,
further comprising a date-and-time setting frequency information storage unit storing a number of date-and-time setting requests ever accepted by said date-and-time setting request reception unit,
wherein said signature generation unit generates a signature according to the information about the date-and-time setting frequency information in addition to the date-and-time information.

Claims 29-38 (withdrawn).

39. (new) A method, comprising:
accepting at least one request from any of a plurality of managers to set date and time, with at least one of the managers having higher priority for acceptance of requests than other managers; and
maintaining the date and time in a device in correspondence with the at least one request.

40. (new) A method as recited in claim 39, wherein a predetermined manager has the higher priority than the other managers and after a first request is accepted from the predetermined manager no requests are accepted from the other managers.

41. (new) A method as recited in claim 39, wherein the managers have different hierarchical levels and a higher level manager has the higher priority than the other managers and requests from the higher level manager are always accepted.

42. (new) A method as recited in claim 39, further comprising generating a signature for input data to be signed according to the information on the timing indicator.

43. (new) A date and time management system, comprising:
management devices, each including a setting request unit issuing a setting request for date and time; and
user devices, each including

a reception unit accepting an initial setting request from any management device before accepting a prioritized setting request from a specified management device, and accepting subsequent setting requests only from the specified management device after accepting the prioritized setting request from the specified management device; and

a clock unit setting the date and the time in response to each setting request accepted by said reception unit.

44. (new) A date and time management system as recited in claim 43, wherein the specific management device is operated by a predetermined manager.